Institutional Control Data Standard and IC Tracking System Status
April 5, 2006

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2002 Focus Groups

- Headquarters Group - June 5
- States Focus Group - June 18-19
- Regional Focus Group - June 26-27
- Other Federal Agencies - July 23-24
- Non-regulated-industry - October 8
- Local Agencies - October 10-11
- Policy Think-Tanks - October 22

Data Standard Coordination

- Collaborative development process between OSWER programs, other Federal agencies, States, Local governments, NGOs, and non-regulated industry
- Developed in concert with EPA's OEI, ECOS, ASTSWMO, and ICMA
- Cross-program, cross-agency application
- Component-based structure to facilitate data exchange and foster reuse
- Flexible design to accommodate future additions to existing lists of permissible value examples

Data Standard Components

- IC Instrument
- IC Objective
- Location
- Engineering Control
- IC Affiliate
- IC Resource
- IC Event

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Data Standard Overview (continued)

- Utilizes XML –
  - » EPA and universal standard for exchanging data between parties
- Consists of XML Schema Definition (XSD) –
  - » Defines how IC data should be organized
  - » Modular design to allow for reuse and extensibility
  - » Multiple methods of implementation for cataloging and transferring data

Data Standard Implementation

- Establishes data element relationships to facilitate IC data transfer through:
  - » "Mapping" of data elements from existing tracking systems to the standard
  - » "Adoption" of exact data elements from the standard within new or enhanced tracking systems
- Information on the standard available through the EDSC website www.envdatastandards.net and www.epa.gov/edr

EPA's ICTS Purpose/Objectives

- Purpose:
  - » Identify the status of Institutional Controls at all NPL Construction Complete sites
- Objectives:
  - » Document the integrity of EPA NPL remedies
  - » Identify sites with missing/ineffective ICs and assist Regions in prioritizing workload for resolving IC issues
  - » Provide baseline information to the public on NPL Construction Completion sites with ICs in their community

Tier I Data Elements

- Site Name/Location
  - » Pre-populated from CERCLIS
- Media with contamination that do not support UU/UE
- ICs required in Decision Documents
- Objective of the IC
  - » Actual and Best Professional Judgment
- Mechanism
  - » Actual and Best Professional Judgment
- Implementation Status
- Source Documentation/Links to websites & databases
- Contact Information

Data Entry Background

- Majority of Regions used centralized data entry
  - » Paper forms were developed and completed by site managers
  - » IMC or IC coordinator performed data entry
- Average time to enter Tier 1 site information was reported to be1.5 hours
- Majority of Regions require additional time to fully populate Tier 1

Preliminary Sites Statistics

- About 25 % of deleted sites reportedly with contaminated media and no ICs
- Construction Completion sites with reportedly missing objectives for any media (neither planned/implemented)
  - » 31% CC sites report missing objectives
  - » the Regions identified 1102 missing objectives
- Most common missing media missing objective(s)
  - » Groundwater 882 objectives are neither planned nor implemented

Use of Mechanisms General Trend

- Most common IC Mechanism reported by category
  - » Governmental controls
  - » Proprietary controls
  - » Enforcement devices
  - » Informational devices

Individual Mechanisms General Trend (cont.)

- Most commonly used IC mechanisms reported
  - » Consent Decree
  - » Deed restriction (unspecified type)
  - » Restrictive covenant
  - » Deed notice

General Trend in Objectives (cont.)

- Most common IC objectives reported
  - » Protect the integrity of the remedy
  - » Prohibit ingestion exposure
- Much less often
  - » Protect dermal contact
  - » Protect inhalation exposure
  - » Prohibit residential use
  - » Prohibit other use of groundwater
  - » Prohibit plume movement

Observations

- The focus of the early ICs has been more heavy toward protecting the remedy than human health
- More resource intensive mechanisms are commonly used (i.e., CDs, easements)
- Many of the reported missing ICs relate to groundwater
- The ICTS data does not address whether:
  - » the IC mechanism is right for the objective
  - » the IC is effective
  - » establishes no implementation, monitoring or enforcement relationships

Next Steps

- Finish entering data for missing sites
- Enter into a focused QA stage
  - » Regional gap analysis
  - » Finalizing electronic approval process
- Deletions in the pipeline
- Talk about what information we are willing to share
  - » ICs required: yes, no, undetermined
- Get latest summary reports and lists to Regions to scrub
- Begin translating the strategy to the Regional workload